

CLAIM AMENDMENTS

1. (Currently Amended) A soft flexible helical vasoocclusion coil for use with a wire having a distal end, said coil having:

(a)-a proximal end;

a coupling member disposed on said proximal end and configured adapted to detachably couple said proximal end to the distal end of the wire;

(b) a distal end;

*P<sub>1</sub>*  
(c) ~~said helical vasoocclusion coil comprising~~ a coiled body further wound into a helical structure formed of a multiplicity of windings having a proximal-most winding, a distal-most winding, and main body windings between said proximal-most and distal-most windings, said main body windings having a uniform first diameter, and said proximal-most and distal-most winding a second diameter smaller than said first diameter, having a first diameter immediately adjacent said distal end and said proximal end; and

(d) ~~said helical vasoocclusion coil being further wound into a second diameter smaller than said first diameter at said proximal end and at said distal end, whereby wherein~~ said proximal end and said distal end are positioned radially inwardly of said proximal-most and distal-most windings, respectively immediately adjacent first diameter, such that the coil and said coiled body acts to occlude a vessel or a cavity when placed within said the vessel or cavity.

2. (Cancelled).

3. (Currently Amended) The coil of claim 1 wherein said ~~proximal end has a coupling member that is configured to detachably interlocks with the distal end of the wire.~~

4. (Currently Amended) An assembly for use in occluding a vessel or a cavity within a vessel comprising:

(a) an elongated wire having a distal end that carries a first coupling member; and

(b) a soft flexible helical vasoocclusion coil having:

(i) a proximal end ~~that carries;~~

a second coupling member disposed on said proximal end and detachably coupled to  
the said first coupling member;

(ii) a distal end;

*f<sub>1</sub>*  
(iii) ~~said helical vasoocclusion coil comprising a coiled body further wound into a~~  
helical structure formed of a multiplicity of windings having a proximal-most winding, a distal-most  
winding, and main body windings between said proximal-most and distal-most windings, said main  
body windings having a uniform first diameter, and said proximal-most and distal-most winding a  
second diameter smaller than said first diameter ~~having a first diameter immediately adjacent said~~  
~~distal end and said proximal end; and~~

(iv) ~~said helical vasoocclusion coil being further wound into a second diameter~~  
~~smaller than said first diameter at said proximal end and at said distal end, whereby wherein~~ said  
proximal end and said distal end are positioned radially inwardly of said proximal-most and distal-  
most windings, respectively immediately adjacent first diameter, such that the coil and said coil acts  
to occlude a vessel or a cavity when placed within said the vessel or cavity.

5-17. (Cancelled)

18. (New) The coil of claim 1, further comprising fibers attached to said windings for  
facilitating embolization.

19. (New) The coil of claim 1, wherein said first diameter is in the range of 0.2 mm to 30  
mm.

20. (New) The coil of claim 1, wherein said first diameter is in the range of 2.0 to 20 mm.

21. (New) The assembly of claim 4, wherein said second coupling member detachably interlocks with said first coupling member.

22. (New) The assembly of claim 4, wherein said coil further comprises fibers attached to said windings for facilitating embolization.

23. (New) The assembly of claim 4, wherein said first diameter is in the range of 0.2 mm to 30 mm.

fi 24. (New) The assembly of claim 4, wherein said first diameter is in the range of 2.0 mm to 20 mm.

25. (New) A soft flexible helical vasoocclusion coil, comprising:

a proximal end;

a distal end;

a coiled body further wound into a helical structure formed of a multiplicity of windings having a proximal-most winding, a distal-most winding, and main body windings between said proximal-most and distal-most windings, said main body windings having at least one winding having a first diameter, and said proximal-most and distal-most winding a second diameter smaller than said first diameter, wherein said proximal end and said distal end are positioned radially inwardly of said proximal-most and distal-most windings, respectively, and said coiled body acts to occlude a vessel or a cavity when placed within the vessel or cavity.

26. (New) The coil of claim 25, further comprising fibers attached to said windings for facilitating embolization.

27. (New) The coil of claim 25, wherein said first diameter is in the range of 0.2 mm to 30 mm.
28. (New) The coil of claim 25, wherein said first diameter is in the range of 2.0 to 20 mm.
29. (New) The coil of claim 25, wherein said at least one winding comprises all windings of the main body windings, and said first diameter is a uniform diameter.
30. (New) An assembly for use in occluding a vessel or a cavity within a vessel comprising:  
an elongated wire having a distal end; and  
a soft flexible helical vasoocclusion coil mounted to said distal end of said wire, said coil having:
- P*
- a proximal end;
  - a distal end;
  - a coiled body further wound into a helical structure formed of a multiplicity of windings having a proximal-most winding, a distal-most winding, and main body windings between said proximal-most and distal-most windings, said main body windings having a first diameter, and said proximal-most and distal-most winding a second diameter smaller than said first diameter, wherein said proximal end and said distal end are positioned radially inwardly of said proximal-most and distal-most windings, respectively, and said coil acts to occlude a vessel or a cavity when placed within the vessel or cavity.
31. (New) The assembly of claim 30, further comprising fibers attached to said windings for facilitating embolization.
32. (New) The assembly of claim 30, wherein said first diameter is in the range of 0.2 mm to 30 mm.

33. (New) The assembly of claim 30, wherein said first diameter is in the range of 2.0 to 20

mm.

34. (New) The assembly of claim 30, wherein said at least one winding comprises all  
windings of the main body windings, and said first diameter is a uniform diameter.

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